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ABSTRACT

The development and progress for 1975-1980 of equal educational opportunity programs in California are summarized, and proposals for progress over the next 5 years and 10 recommendations for public action are offered. The current status of equal educational opportunity is examined for economically-deprived students, women, and ethnic minority students. Additionally, goals and activities are identified for the following levels: junior and senior high schools, high school through first year of college, community college programs, four-year college programs, and graduate and professional programs. Priorities for action include: focusing effort on the high school curriculum, focusing attention on program completion as well as admission, enhancing the educational environment, improving community college opportunities, improving undergraduate support services, improving coordination of postsecondary outreach efforts, retaining mathematics and science-based career options, improving graduate-level efforts, involving the private sector, and assessing the potential impact of changes in federal funding. Appended materials include the text of Assembly Concurrent Resolution Number 151, conclusions from previous reports on equal educational opportunity, and data on the ethnic composition of students and graduates, 1975-1980. (SW)

WHEREAS, The Legislature recognizes that certain groups, as characterized by sex, ethnic, or economic background, are underrepresented in our institutions of public higher education as compared to the proportion of these groups among recent California high school graduates; and WHEREAS, It is the intent of the Legislature that such underrepresentation be addressed and overcome by 1990;...the Regents of the University of California, the Trustees of the California State University and Colleges, and the Board of Governors of the California Community Colleges are hereby requested to prepare a plan that will provide for addressing and overcoming, by 1990, ethnic, economic, and sexual underrepresentation in the makeup of the student bodies of institutions of public higher education as compared to the general ethnic, economic, and sexual composition of recent California high school graduates.... The regents, the trustees, and the board of governors shall annually report to the California Postsecondary Education Commission, on or before July 1 of each year, which shall integrate and transmit the reports to the Legislature by December 31 of each year with evaluations and recommendations, on their progress, including specification as to what obstacles stand in the way of implementation of the plan....

EQUAL EDUCATIONAL OPPORTUNITY IN CALIFORNIA POSTSECONDARY EDUCATION

PART IV

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

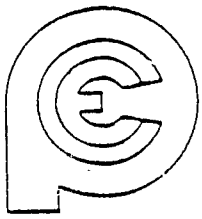
The California Postsecondary Education Commission was created by the Legislature and the Governor in 1974 as the successor to the California Coordinating Council for Higher Education in order to coordinate and plan for education in California beyond high school. As a state agency, the Commission is responsible for assuring that the State's resources for postsecondary education are utilized effectively and efficiently; for promoting diversity, innovation, and responsiveness to the needs of students and society; and for advising the Legislature and the Governor on statewide educational policy and funding.

The Commission consists of 15 members. Nine represent the general public, with three each appointed by the Speaker of the Assembly, the Senate Rules Committee, and the Governor. The other six represent the major educational systems of the State.

The Commission holds regular public meetings throughout the year at which it takes action on staff studies and adopts positions on legislative proposals affecting postsecondary education. Further information about the Commission, its meetings, its staff, and its other publications may be obtained from the Commission offices at 1020 Twelfth Street, Sacramento, California 95814; telephone (916) 445-7933.

The arrow on the cover contains language from Assembly Concurrent Resolution No. 151 (1974), which led to this report and which is reproduced in its entirety as Appendix A on pp. 31-32.

EQUAL EDUCATIONAL OPPORTUNITY
IN CALIFORNIA POSTSECONDARY EDUCATION
Part IV



CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
1020 Twelfth Street, Sacramento, California 95814

Commission Report 82-19

April 1982

SUMMARY

This fourth report in a series of Commission responses to Assembly Concurrent Resolution 151 (1974) outlines the development of equal educational opportunity programs in California (pp. 1-3), summarizes progress from 1975 to 1980 and offers proposals for progress over the next five years (pp. 5-23), and recommends ten emphases for public action to assure progress during these years (pp. 25-30).

Four major themes dominate the report:

1. During the past six years the number of ethnic minorities graduating from college or completing their college programs has not increased substantially. Chicano and Black students still enroll in college at a much lower rate than white students. Women increasingly participate in higher education, but the number of ethnic minority women, particularly Chicanas, on either the undergraduate or graduate level is not increasing significantly. In order to make further progress in expanding higher education opportunities for these underrepresented students, equal educational opportunity efforts must span the junior high school, senior high school, and postsecondary levels of education (pp. 5-23).

2. The greatest emphasis in the State effort must be directed to strengthening the basic college preparatory curriculum in mathematics, English, and science at California's junior and senior high schools (p. 25).

3. In order to improve the effectiveness of State-supported activities for equal educational opportunity over the next five years, admission into college and completion of a college program should be regarded as the two equally important goals to guide public policy (p. 26).

4. Special programs designed to assist low-income and ethnic minority students are most successful when the college as a whole provides an academically stimulating and supportive environment in which all students feel welcome and in which all are given a full opportunity to succeed, including the expectation that they will succeed. Without this atmosphere, the special programs have only limited ability to retain students through college, and the resources provided to operate these programs cannot be utilized as effectively as they should be. Success in equal educational opportunity efforts requires a comprehensive institutional effort, coordinating all existing campus resources (p. 26).

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APPENDICES

ONE

ORIGINS OF THE REPORT

Seven years ago, the Legislature adopted Assembly Concurrent Resolution 151 (1974), which requested the Regents of the University of California, the Trustees of the California State University and Colleges, and the Board of Governors of the California Community Colleges to prepare plans for "addressing and overcoming, by 1980, ethnic, economic, and sexual underrepresentation in the make-up of the student bodies of institutions of public higher education as compared to the general ethnic, economic, and sexual composition of recent California high school graduates" (Appendix A, pp. 31-32 below).

ACR 151 also instructed the California Postsecondary Education Commission to report periodically on progress toward this goal, identify obstacles inhibiting its achievement, and present recommendations about it. Pursuant to this resolution, the Commission has issued three previous reports on equal educational opportunity (1976, 1978, and 1980). Their conclusions, many of which are still applicable today, are reproduced in Appendix B on pp. 33-35 below.

The history of equal educational opportunity efforts to expand postsecondary opportunities for low-income and ethnic minority Californians began at least a decade before the adoption of ACR 151:

In 1964, the federal government established the Upward Bound and Talent Search programs--two pre-college efforts to overcome deficiencies in secondary school counseling and to provide tutorial and enrichment services for junior high and senior high school students. That same year, the University of California established its Educational Opportunity Program--a comprehensive effort to provide access and academic support services for low-income students with academic potential.

In 1969, the federal government established Special Services for Disadvantaged Students to provide remedial and other special services to postsecondary-level students who were educationally or economically disadvantaged. The California Legislature provided funds to the State Department of Education to establish Demonstration Programs in Reading and Mathematics to provide intensive instruction for low-achieving seventh, eight, and ninth grade students in low-income areas. It provided support to the California State University and Colleges to establish the Educational

Opportunity Program, a comprehensive effort providing access and support services for students from low-income backgrounds. And it gave funds to the California Community Colleges to establish the Extended Opportunity Programs and Services, for a similar effort with their students.

In 1970, private funds helped establish the MESA program (Mathematics, Engineering, Science Achievement) at Oakland Technical High School to increase the number of ethnic minority students who were academically prepared to enroll in mathematics and science-related disciplines in college. Beginning in 1978, the State allocated funds to support this program as well.

In 1973, the federal government established Educational Opportunity Centers in low-income neighborhoods to disseminate information on academic and financial assistance for college.

The federal and State programs established from 1964 through 1974 had, and continue to have, a major impact on increasing the numbers of low-income and ethnic minority students enrolling in and graduating from college, but between 1972 and 1976, enrollment and graduation rates for minority students tended to stabilize. Consequently, the Legislature initiated new efforts at outreach.

In 1976, two years after the adoption of ACR 151, the University of California established the Partnership Program to assist low-income and ethnic minority students in grades seven through nine to begin preparing themselves for college. (In 1981, it changed the name of this effort to Early Outreach Program.)

In 1978, the Legislature appropriated funds to the California State University and Colleges to establish three pilot efforts to experiment with nontraditional outreach approaches to high school students. The next year, these pilot efforts were expanded, and the year after, the Core Student Affirmative Action Program was established on all 19 State University campuses to coordinate and expand, where necessary, existing services, resources, personnel, and policies in the areas of outreach, retention, and educational enhancement.

In 1979, the University of California established its Partners Program to provide continuing assistance to ninth through eleventh grade students served by the Partnership Program. (In 1981, it changed the name of this effort to the Early Outreach Program.) It provided funds to the University of California to establish the Academic Enrichment Program on four campuses, involving faculty working with secondary school students to improve their academic skills in specific disciplines. And it funded the California Student Opportunity and Access Program (Cal-SOAP), involving five pilot interinstitutional projects to increase the enrollment of low-income students in postsecondary institutions through cooperation among all postsecondary institutions in a region.

In 1980, the Legislature provided support to the California Community Colleges for its Student Affirmative Action Transition and Internship Program, a pilot effort to increase the transfer rate of low-income, ethnic minority students from two- to four-year institutions.

These efforts by State and federal government and by all three public segments of California postsecondary education have led to the conclusions and recommendations on the following pages.

TWO

THE CURRENT STATUS OF EQUAL EDUCATIONAL OPPORTUNITY

In ACR 151 (1974), the California Legislature adopted as a goal proportional enrollment levels in public higher education for economically deprived students, women, and ethnic minorities, consistent with their representation among graduates of public high schools. Over the past seven years, progress toward this goal has been mixed:

ECONOMICALLY DEPRIVED STUDENTS

Because limited comparable data are available about the income of California high school and college students and their families, no definite judgment can be made about success in achieving equality of enrollment for low-income students. Nevertheless, since 1974 the student financial assistance programs of the State have enabled thousands of low-income students to enroll in college.

WOMEN

Concerning the representation of women, statistics are clear and generally encouraging, at least at the undergraduate level:

- Undergraduate Women: On the undergraduate level, women generally have equal representation in all segments of postsecondary education. Thus, the goal of overcoming underrepresentation of women students in undergraduate education has been achieved.

- Women Graduate Students: On the graduate level, women continue to be underrepresented in the University of California. However, since 1972, there has been a steady, albeit slow, increase in the number and proportion of women in the graduate student body, although their proportions vary considerably among disciplines. If the current efforts continue, it is reasonable to expect that the goal of equal representation of women students in graduate education will be achieved in many disciplines during the current decade. However, other fields such as engineering will require a considerably longer effort.

- Minority Women: The increasing participation by women in postsecondary education during the past ten years has not included a substantial increase in the number of ethnic minority women, particularly Chicanas, on either the undergraduate or graduate level, and they continue to be substantially underrepresented.

ETHNIC MINORITY STUDENTS

The information on ethnic minority enrollments is not complete, but what evidence exists is generally discouraging: With the exception of students identified as Asian, minority students tend to drop out of the educational system progressively sooner than majority students, leading to increasingly severe underrepresentation at each progressive level. Although equal educational opportunity efforts of the past decade have increased the numbers of minority students enrolling in postsecondary education, the numbers graduating from college or completing their educational programs has not substantially increased. For them, equality of educational opportunity remains a goal; but it is not yet a reality.

- Chicano Students: Chicanos continue to be more underrepresented at all levels and in all segments of postsecondary education than any other ethnic group. As Table 1 shows, they constituted 15 percent of the high school graduating class in 1979, but only 12 percent of the first-time college freshmen. Since Fall 1975, the proportion of Chicano undergraduate students in each segment has increased by approximately 1 percentage point (Appendix C, below). The increase in the proportion of Chicano graduate students has been even more slight. While some progress has been made during the past decade, it is unreasonable to expect proportional representation of Chicanos among college graduates during the current decade without more and varied efforts.

- Black Students: Blacks have attained equal representation in the student body of the California Community Colleges, but they continue to be underrepresented in the undergraduate and graduate programs at the State University, at the University of California, and at the independent institutions. Approximately 85 percent of the Black students enrolled in postsecondary institutions are enrolled in Community Colleges, and few of them transfer to baccalaureate institutions. In Fall 1979, for example, Blacks constituted less than 4 percent of the students transferring into the University of California and less than 7 percent transferring into the California State University. Moreover, during the past six years there has been a decrease in the rate (and, in some segments, the number) of Black enrollments in California colleges and universities. This decrease in enrollment has been particularly acute at the graduate level. Black males participate in college at a substantially lower rate than Black females. Given these trends as well as the sizable degree of the underrepresentation of Black students in the University of California, it is unreasonable to expect proportional representation of Blacks among college graduates during the current decade without more and varied efforts.

TABLE 1

PERCENT ETHNIC DISTRIBUTIONS OF 1979 GRADUATES OF PUBLIC CALIFORNIA HIGH SCHOOLS, FIRST-TIME FRESHMEN IN THE THREE PUBLIC SEGMENTS IN FALL 1979, AND GRADUATES OF THE THREE PUBLIC SEGMENTS, 1979-80

			Ethnic Groups*						
Segment	Sex	Number	American Indian	Asian	Filipino	Black	Chicano and Other Hispanic	White	Ethnic Data Missing
High School Graduates	M	127,683	0.7	4.7	0.9	9.0	15.0	69.7	2.6
	F	129,479	0.7	4.5	1.0	9.5	15.0	69.3	2.4
First-Time Freshmen									
California Community Colleges	M	62,555	1.6	4.7	1.3	10.5	12.8	69.1	5.2
	F	65,257	1.6	3.6	1.2	10.8	12.9	69.9	4.6
California State University	M	10,609	1.3	8.0	2.0	6.8	11.4	70.5	29.7
	F	13,124	1.3	6.9	2.2	10.4	10.6	68.6	30.4
University of California	M	7,720	0.3	13.9	1.6	3.3	6.9	74.0	3.8
	F	7,924	0.2	13.0	1.9	5.4	5.9	73.6	3.1
Total	M	80,884	1.5	6.0	1.4	9.3	12.0	69.8	11.7
	F	86,305	1.4	5.0	1.4	10.2	11.9	70.1	11.2
	T	167,189	1.4	5.5	1.4	9.8	12.0	69.9	11.4
College Graduates (1979-80)									
California Community Colleges									
Associate Degrees		56,519	1.0	6.7	**	8.5	9.4	72.4	36.8
Certificates		5,671	0.7	6.5	**	9.9	11.5	71.3	34.7
Other Formal Recognition		4,433	0.9	7.6	**	5.1	10.8	74.5	19.3
California State University									
Bachelor's Degrees		42,122	1.1	6.9	1.2	5.3	6.9	78.7	13.9
Master's Degrees		9,732	1.2	6.1	1.6	4.3	5.6	81.3	18.0
University of California									
Bachelor's Degrees		19,989	0.5	10.5	0.8	3.0	4.8	80.4	7.7
Master's Degrees		5,665	0.7	6.6	0.5	3.0	4.6	84.6	7.2
Doctorate Degrees		2,030	0.2	5.9	0.0	2.6	2.9	88.4	14.1
Professional Degrees		1,832	0.5	9.2	0.7	6.7	9.4	73.5	5.5

*The sum of the percentages in each, exclusive of "Ethnic Data Missing," is 100. Thus, the first entry at the top of the table means that American Indian males comprised 0.7 percent of the male high school graduates in 1979. Similarly, the last entry at the bottom of the table means that whites comprised 73.5 percent of the combined group of professional degree recipients from the University of California in 1979-80 segments of higher education in Fall 1979.

**Included in "Asian" group.

- Asian Students: Available data indicate that, as a group, Asian students are not underrepresented in any segment of postsecondary education. However, significant differences exist among the several Asian ethnic groups, with each having a different economic and educational background and level of language skills. Students of Chinese, Filipino, Japanese, and Korean background whose families have participated in American life for some time are far better represented in postsecondary education than recent immigrants such as refugees from Southeast Asia.

- American Indian Students: Available data do not provide the basis for drawing firm conclusions about the level of representation of American Indians in postsecondary education. The fact that many college students inaccurately check "Native American" or "Indian," the lack of agreement on the definition of an American Indian, and the relatively small size of this ethnic group account for this situation.

This continuing underrepresentation of ethnic minority students is attributable both to societal and educational factors, some of which cannot be affected by State and institutional effort at the postsecondary level alone.

For example, economically, parents of ethnic minority students are more likely to be under- or unemployed and to earn lower wages than those of white students. Socially, ethnic minority families, particularly Chicanos and Blacks, are more concentrated in low socio-economic urban settings. Both of these factors directly contribute to lower participation rates in college.

Educationally, low-income Black, Chicano, and American Indian students have an extremely high drop-out rate from high school. (Nationally, for example, nearly 45 percent of Hispanic and 30 percent of Black students never finish high school, compared to 17 percent of white students.) They are less likely to complete college-preparatory courses in high school in order to be eligible for university admission. A large proportion of Asian students and a fourth of all Chicano students have limited English speaking and writing skills that restrict their success in academic courses.

Moreover, high schools in low-income areas are often ill equipped to offer college preparatory curriculum due to inadequate laboratory facilities, attrition of discipline-specific teachers to other schools, and the assignment of teachers to curriculum areas in which they have little familiarity. Without the several equal educational opportunity programs at the college level, the proportion of minorities continuing their education would likely be worse.

THREE

REASONS AND STRATEGIES FOR RENEWED EFFORT

California must continue its progress toward achieving equal educational opportunity not only because the goal of Assembly Concurrent Resolution 151 is not yet a reality, but for other practical reasons of equity, justice, and self-interest:

- The ethnic composition of California society is becoming increasingly heterogeneous. In Fall 1979, approximately half of the children enrolled in kindergarten in California were ethnic minorities, with more than 30 percent of these children Chicano. If these children are not prepared for college at the same rate and the same quality as their white counterparts, the number of California high school graduates going on to college will drop substantially.

- Unless ethnic minorities and women are trained at California colleges to be eligible to fill highly skilled jobs, California will have considerable difficulty maintaining its past rate of economic and technological growth.

- Equal educational opportunities for ethnic minorities and women will help enhance the education of all students and prepare them for life in a culturally and linguistically pluralistic society, both at home and abroad. While possessing English-language skills is a necessity for minorities to participate fully in American society, full competency in a second language and sensitivity to cultural pluralism are skills needed by all students, minority or majority.

- Equal educational opportunity and quality of education are compatible goals for California. Educational excellence and equality of opportunity to benefit from excellent programs are inseparable, mutually consistent, and mutually attainable. Moreover, as the Commission asserted in its current five-year plan, "access is valuable to students and society only if it is access to high-quality education. Access to anything less diminishes both the institution and the student" (1981b, p. 5). All young people, regardless of their previous educational deprivation, should have the opportunity to proceed as far as their abilities allow them to in the completion of high-quality programs at the postsecondary as well as elementary and secondary school levels. Funds spent to expand these opportunities are a better investment than those currently expended for welfare, rehabilitation, and incarceration.

Educational institutions should acknowledge and accept the distinctive values, culture, and language skills of differing minority groups. For substantial progress in expanding educational opportunities, student affirmative action must be a comprehensive institutional effort coordinating all existing campus resources to meet the educational needs of all students, including minority students. Special efforts such as Educational Opportunity Programs (EOP) or Extended Opportunity Programs and Services (EOPS) should be viewed as required transitional devices needed until the entire institution is effectively mobilized to serve the entire student body.

Because many of the educational problems experienced by minority students occur before they reach college, equal educational opportunity efforts must span the junior high school, high school, and postsecondary levels of education. Table 2 provides an overview of this needed comprehensive effort, involving six phases moving from the junior high school through graduate and professional study. For each phase, it identifies specific goals, objectives, needed activities, and measurable criteria of progress. These six phases of the effort are interrelated and interdependent, since substantial progress at any one level cannot be achieved until greater success is demonstrated at preceding levels. Success across all phases will require the cooperative effort of elementary, secondary, and postsecondary educators extending into the next century.

GOALS AND ACTIVITIES FOR THE SECONDARY COMPONENT

The three overall goals for equal educational opportunity efforts during the first two phases--from seventh to ninth grade, and tenth through twelfth grade--should be to (1) reduce the dropout rate of minority students so that they graduate from high school at about the same rate as majority students; (2) improve the educational environment of schools enrolling predominantly minority and low income students so that their graduates achieve eligibility for the public four-year institutions at relatively the same rate as graduates from middle- and upper-income schools; and (3) expand and improve the English, mathematics, and science curricula so that substantially larger numbers of women and minority students complete four years of college preparatory study in each of these areas.

Phase One: Junior High School

The major strategy to achieve these three goals in grades seven through nine should be to increase the number and improve the academic preparation performance of students enrolling in college preparatory courses. Since the junior high years provide the first opportunity for students to have choices among elective courses, it is particularly important that equal educational opportunity efforts begin at least by this level. The wrong choices at this level can make college enrollment and success far less likely.

For example, success in later mathematics and science courses requires mastery of ninth grade algebra. This course provides the foundation for tenth grade geometry, eleventh grade algebra and chemistry, and twelfth grade trigonometry, elementary functions and physics, as well as college mathematics and science. In addition, to succeed at college-level science requires skill in calculus. Yet few minority students enroll in calculus. Even in a California school district with a long-standing commitment to equal opportunity, only 25 percent of Chicano students and 20 percent of Black students enrolled in introductory calculus-track courses in 1979, compared to 72 percent of white students and 79 percent of Asian students. In the advanced calculus-track courses, the enrollment of Black students dropped to 5 percent. Women constituted 53 percent of the students in introductory calculus-track courses but only 41 percent in advanced courses (Sells, 1979, p. 22).

Existing programs working with junior high school students tend to emphasize generally one of three different tactics:

1. Strengthen existing instructional programs particularly in mathematics and science. An example is the Cooperative College Preparatory Program in Oakland, a joint project between the University of California, Berkeley, and the Oakland Unified School District.

2. Strengthen the academic skills of high-potential target students to increase the probability that they will achieve at a higher-than-average level in college and pursue graduate or professional studies. Examples are Mathematics, Engineering, and Science Achievement (MESA), aimed at increasing the number of ethnic minorities qualified to pursue university education in mathematics-based fields, and the University of California's Academic Enrichment Program, devoted to increasing the number of underrepresented students qualified to pursue university education in specified target disciplines.

TABLE 2: COMPONENTS OF A COMPREHENSIVE

Phase One: Junior High School

GOALS:

1. To increase the number of ethnic minority students enrolling in college preparatory programs.

2. To improve the academic performance of these students.

OBJECTIVES:

1. Strengthen the basic college preparatory English, mathematics, and science programs.

2. Strengthen policies and procedures which support the academic program.

3. Strengthen instruction and academic quality or standards.

4. Improve articulation of curriculum within and between junior and senior high schools.

5. Identify and encourage potential college students.

6. Strengthen ninth-grade algebra.

NEEDED ACTIVITIES:

1. Classroom-centered inservice activities for junior high school teachers by college staff.

2. On-going inservice and professional development for teachers, administrators, and counselors.

3. Management support for administrators and counselors working to coordinate junior and senior high school programs.

4. Student-centered activities focusing on motivation, academic enrichment, tutoring, career counseling, and college counseling and information.

MEASURABLE CRITERION OF PROGRESS:

1. The ethnic and sex composition of secondary school students beginning the tenth grade who have completed basic courses in algebra and science is similar to the ethnic and sex composition of tenth-grade students generally.

Phase Two: Senior High School

GOALS:

1. To increase the number of minority students graduating from high school.

2. To increase the number of minority students who are eligible to enroll in public four-year colleges.

3. To increase the number of minority students and women who complete four years of English, mathematics, and science.

OBJECTIVES:

1. Strengthen the basic college preparatory English, mathematics, and science programs.

2. Strengthen policies and procedures which support the academic program.

3. Strengthen instruction and academic quality or standards.

4. Identify and encourage potential college students.

5. Encourage minorities and women to take calculus-track courses to be eligible for college science.

NEEDED ACTIVITIES:

1. Classroom-centered inservice activities for high school teachers by college staff.

2. On-going inservice and professional development for teachers, administrators, and counselors.

3. Student-centered activities focusing on academic enrichment, tutoring, career counseling, college counseling and information, and application assistance.

MEASURABLE CRITERIA OF PROGRESS:

1. The ethnic and sex composition of secondary school graduates each year is similar to the ethnic and sex composition of students enrolled in California secondary schools four years previously.

2. The ethnic and sex composition of secondary school graduates eligible for admission to the University of California and the California State University is similar to the ethnic and sex composition of secondary school graduates generally.

3. The ethnic and sex composition of secondary school graduates who have completed four years of college-preparatory English and mathematics is similar to the ethnic and sex composition of secondary school graduates generally.

Phase Three: High School Through First Year of College

GOALS:

1. To increase the number of minority students who apply to and enroll in college.

2. To increase the number of minority students who successfully complete the first year of college.

3. To increase the number of minority students and women who enroll in mathematics-related or physical science disciplines.

OBJECTIVES:

1. Improve articulation of curriculum between senior high schools and colleges.

2. Identify and encourage college-bound students.

3. Identify and encourage first-year college students.

4. Strengthen instruction and academic quality or standards.

NEEDED ACTIVITIES:

1. Support for college administrators and faculty to work with their secondary school colleagues.

2. Student-centered activities focusing on college counseling and information, application assistance, referral assistance for those denied admission, academic advising, and career planning.

3. Student-centered activities focusing on academic enrichment prior to and during the students' initial academic year on the college campus.

MEASURABLE CRITERION OF PROGRESS:

1. The ethnic and sex composition of first-time freshmen enrolled in California colleges and universities is similar to the ethnic and sex composition of the previous secondary school graduating class.

EQUAL EDUCATIONAL OPPORTUNITY EFFORT

Phase Four: Community College Programs

GOALS:

1. To increase the number of minority students who complete a terminal or transfer program at the Community Colleges.

2. To increase the number of minority students who transfer to four-year institutions.

OBJECTIVES:

1. Identify and encourage new students to complete their Community College program.

2. Identify and encourage students with the potential to complete baccalaureate programs.

3. Strengthen instruction and academic quality or standards.

NEEDED ACTIVITIES:

1. Student-centered activities focusing on tutoring, academic and career counseling, special instruction in basic skills and language development, and cultural enrichment.

2. Student-centered activities focusing on college counseling and information, application assistance, and academic counseling.

MEASURABLE CRITERIA OF PROGRESS:

1. The ethnic and sex composition of students receiving degrees and certificates from Community Colleges is similar to the ethnic and sex composition of students enrolled in Community Colleges.

2. The ethnic and sex composition of students transferring from Community Colleges into four-year institutions is similar to the ethnic and sex composition of students enrolling in Community Colleges.

Phase Five: Four-Year College Programs

GOALS:

1. To increase the number of minority students who complete a baccalaureate program.

2. To increase the number of minority students and women who complete baccalaureate programs in mathematics-related and science disciplines.

OBJECTIVES:

1. Improve articulation of support services for target students between and among two- and four-year institutions.

2. Strengthen instruction and academic quality or standards.

3. Identify and encourage target students at four-year colleges to complete their program.

NEEDED ACTIVITIES:

1. Management and coordination support for administrators, faculty, and counselors at Community Colleges and four-year institutions.

2. On-going inservice and professional development for faculty, administrators, and other staff.

3. Student-centered activities focusing on tutoring, academic enrichment, academic advising, and career counseling.

4. Increased hiring of minority and women faculty and staff.

MEASURABLE CRITERIA OF PROGRESS:

1. The ethnic and sex composition of baccalaureate-degree recipients from California colleges is similar to the ethnic and sex composition of secondary school graduates four years previously.

2. The ethnic and sex composition of baccalaureate-degree recipients in the scientific, business, and mathematics-based disciplines is similar to the ethnic and sex composition of baccalaureate-degree recipients generally.

Phase Six: Graduate And Professional Education

GOALS:

1. To increase the number of minority students and women who enroll in and graduate from graduate and professional school programs.

OBJECTIVES:

1. Identify and encourage underrepresented students with the potential to complete advanced degree programs.

2. Improve articulation of support services for underrepresented students between and among four-year institutions and graduate and professional schools.

NEEDED ACTIVITIES:

1. Financial aid programs which include research and teaching assistant opportunities in graduate programs.

2. Student-centered activities focusing on tutoring and academic enrichment, especially in professional programs.

3. On-going inservice and professional development for faculty, administrators, and other staff.

4. Increased hiring of minority and women faculty to work with graduate students.

MEASURABLE CRITERIA OF PROGRESS:

1. The ethnic and sex composition of recipients of graduate and professional degrees is similar to the ethnic and sex composition of recipients of baccalaureate degrees.

3. Strengthen the academic skills of target students who, without additional academic support, would probably not enroll in college and might not graduate from high school. An example is the federally funded Upward Bound Program.

All three emphases are essential in providing comprehensive services to potential college students. Secondary school efforts to strengthen their college preparatory programs should be supported by college-based efforts to assist high-achieving students and motivate high-potential but low-achieving students. In fact, however, this linkage has not been widely achieved. College-based outreach efforts have received considerably more programmatic attention and greater funding than programs designed to enhance the secondary school curriculum. Often, the college-based programs have operated in isolation from school efforts at curricular reform. Without strong academic college preparatory courses in grades seven through nine, however, outreach programs can have only limited impact. It is also important that public colleges work to increase the number of teachers trained to work with minority students, particularly those with limited English-speaking abilities.

Phase Two: Senior High School

Efforts during grades ten through twelve seek to reinforce Phase One efforts by encouraging students to continue to take college preparatory courses and to graduate from school.

Dropout data are not systematically collected in California, and consequently no current basis exists to assess progress in increasing the high school graduation rate of minority students. However, a recent study by Russell W. Rumberger of Stanford indicates that the dropout ratio nationally among Black and Chicano students is 15 percent and 23 percent, respectively, compared to 10 percent for white students (1981). California's attrition rate between the ninth and twelfth grade rose from 12 percent in 1967 to 22 percent in 1976. This fact is consistent with district reports that Black and Chicano students drop out of California high schools at a rate above 35 percent. Whatever the precise rate in California, it is clear that Black and Chicano participation in college will not increase substantially until their secondary school dropout rate is substantially reduced.

Available data indicate that California Black and Chicano students who do graduate from high school are less than one third as likely as white or Asian students to be eligible to enter the University of California, and they are less than one-half as likely to be eligible to enter the California State University (University of

California, 1978). A primary reason for this lower eligibility rate is the small number of Black and Chicano high school students to take sufficient courses in college preparatory English and mathematics. While students should not be discouraged from pursuing study in any area of their interest, special efforts should be implemented in senior high school grades to encourage minority and women students to complete four years of college preparatory English and mathematics. Success in this area will both increase the number who gain eligibility for admission to public universities as well as provide the student with a full range of options among academic disciplines while at college.

An important factor, however, which will inhibit progress in this area is the critical shortage of qualified mathematics teachers in the secondary schools, particularly those in low-income districts. (A recent survey by the National Science Teachers Association reported that 84 percent of the newly employed science and math teachers in 1981 in the Pacific states were unqualified [Klein, 1982].) Given this condition, it is essential that the California colleges provided expanded in-service training for certified mathematics and science teachers, particularly those employed at secondary schools with large minority enrollments.

Existing senior high school programs have the same programmatic emphases as those identified for Phase One. Their primary difference is the more intensive level of outreach effort by colleges and universities during the last two years of high school, with all three public segments offering services to students. For example, as many as four or five different college outreach programs operate at most high schools with large low-income minority enrollments. Examples of existing programs include MESA and the University Early Outreach Program, as well as the College Core Curriculum at Phineas Banning High School in Wilmington. The Banning Program offers an illustration of what can be achieved by school staff themselves within tight budget constraints.

In order to assess the impact of these multiple outreach efforts, Commission staff have surveyed the principals and head counselors of 175 high schools with large minority enrollments (California Postsecondary Education Commission, 1981a). They perceive these outreach programs to be needed, to complement the high school curriculum, to supplement their counseling and teaching efforts, and thus to allow more students, particularly minorities, to benefit from these services. The following response from a counselor in the Los Angeles area illustrates this favorable response:

> They have had a very positive effect on the student body. Without them, my effectiveness as a college advisor would be limited and many of our students would probably not be

highly motivated to go on to post-high school opportunities.

Additionally, they enable us to visit many college campuses by helping us with transportation. I am able to expand my repertoire of responses in my counseling relationship with students by enabling them to have peer-counselors available . . . .

Hence, by integrating the services offered by these agencies and working them into the total framework of the operation of the school program, the ability of the College Office to serve all the students is enhanced.

While the existing outreach programs provide needed services, their effectiveness can be enhanced by improved coordination within and among the colleges in each region. Each college should designate one individual or office to monitor all of its outreach activities and inform the secondary schools as to this individual or office. In addition, colleges should develop formal, cooperative interinstitutional outreach efforts working with the secondary schools in each region.

GOALS AND ACTIVITIES FOR THE UNDERGRADUATE COMPONENT

The goals of equal educational opportunity at the twelfth grade through the undergraduate years should be four fold--to (1) increase the number and proportion of ethnic minorities who enroll in postsecondary education; (2) increase the number and proportion of minority Community College graduates who complete a terminal program or transfer to a four-year college or university; (3) enhance the educational environment so that a larger number and proportion of minority students complete their program in a timely fashion; and (4) encourage and support minority students and women to major in fields with high labor market demand.

The strategy to achieve these four goals should involve specific efforts at three levels: the transition from high school to college (Phase Three), success in Community College (Phase Four), and completion of four-year programs (Phase Five).

Phase Three: High School Through First Year in College

The goals of Phase Three should be to increase the number of minority students who apply to and enroll in college, successfully

complete the first year of college, and enroll in the physical sciences or mathematics-related disciplines. Existing programs aimed at helping high school seniors make this transition to college have three different emphases:

1. Expanding the availability of information about postsecondary opportunities and financial assistance programs. Two important State-funded programs of this type are the California Student Opportunity and Access Program (Cal-SOAP)--an experimental program established in 1979 with five intersegmental projects operating throughout the State--and the outreach component of the California State University Core Student Affirmative Action Program, which seeks to increase the number of ethnic minorities who gain admission to college.

2. Expanding the number of regularly admissible students who enroll in a specific institution. Examples are the Immediate Outreach Program of the University of California, a State funded effort to recruit ethnic minority students into the University, and the State-funded Community College Extended Opportunity Programs and Services (EOPS) which recruits students handicapped by language, social, or economic disadvantage.

3. Expanding the enrollment of students who have high potential but are not regularly admissible to a particular institution. The primary State-funded program of this type is the Educational Opportunity Program (EOP) of the California State University, which enrolls approximately 6,000 new freshmen or transfer students annually.

These three emphases are necessary components of a comprehensive effort to help students move from secondary to postsecondary education. However, these existing efforts can be strengthened and expanded in three important ways:

First, intersegmental coordination of informational services to prospective college students remains inadequate. Current State resources could be utilized much more effectively through regional cooperation among secondary schools and colleges. The Cal-SOAP Program is an important, albeit limited, experiment in developing successful models of such cooperation. The recent adoption of a statement on coordination and cooperation in outreach programs by the California Round Table on Educational Opportunity is evidence of the segments' commitment to intersegmental cooperation.

Second, colleges have tended to operate their general outreach and recruitment programs in isolation from their on-campus academic support services. The staff responsible for recruiting students is

usually different from the staff the students work with during their first months on campus, leading to problems of communication and inaccurate guidance and counseling. Greater emphasis should be given to providing academic support for students when they arrive on campus, so that they can succeed at rigorous academic programs. The Summer Bridge Program at three University of California campuses (San Diego, Berkeley, and Davis) and the Undergraduate Component of the Professional Development Program at the University of California, Berkeley, are examples of success in developing the necessary linkage between outreach and retention components and providing the students the needed support in moving from high school to college.

Third and most important is poor coordination of curriculum between high school and college. The college preparatory courses in many high schools do not bring even academically superior students to the level of knowledge and skill expected of them in introductory college courses. In order to improve articulation, college administrators and faculty need greater encouragement and support to work with their secondary school colleagues. Examples of needed effort in this area are the joint CSU/UC mathematics diagnostic program and the statements on expected competencies in English and mathematics prepared by the Academic Senates of the three public postsecondary segments.

Phase Four: Community College Programs

Approximately 85 percent of the Chicanos and Blacks enrolled in California's postsecondary education attend the California Community Colleges. Many never complete a certificate or terminal degree program and only a relatively small proportion ultimately transfer to four-year colleges or universities and complete a baccalaureate program. For example, in Fall 1980, Chicano and Black students comprised 12.9 percent and 10.6 percent of Community College students respectively, but they constituted less than 8 percent and 4 percent, respectively, of the students transferring into the University of California, and only 10 percent and 6 percent respectively of students transferring into the California State University. The number of Blacks and Chicanos graduating from four-year colleges will not substantially increase without a corresponding increase in the number transferring into them from Community Colleges.

Existing Community College programs designed to increase the number of minority students who complete a terminal program in a timely fashion and the number who transfer to a four-year institution have two different emphases:

1. Strengthening academic skills of Community College students so that they will be able to complete either terminal or transfer programs. The major State funded program with this emphasis is the Extended Opportunity Programs and Services (EOPS), which serves approximately 68,000 students annually, and provides tutoring, counseling, financial assistance and special summer orientation sessions.

2. Identifying and supporting students with the potential to complete baccalaureate programs. While EOPS includes transfer from Community College to four-year institutions as one of its multiple objectives the only State-funded program that emphasizes transfer is the Community College Student Affirmative Action Transition Program, with three pilot projects in Modesto, San Diego, and Sacramento.

Only a small share of existing equal educational opportunity efforts have been devoted to encouraging and facilitating transfer. Coordination among existing programs should be substantially improved to increase the transfer rate.

Phase Five: Four-Year College Programs

The primary goals of efforts during Phase Five should be to increase the number of minority students who complete the baccalaureate program, while also increasing the numbers of both minority students and women who complete degree programs in mathematics and science-related disciplines.

Currently, Black, Chicano, and American Indian students have somewhat lower graduation rates from college than do white and Asian students. For instance, among freshmen who entered the University of California through regular admissions in 1972, only 43 percent of the Chicano students and only 41 percent of the Black students had graduated by 1977 (five years later) in contrast to 52 percent of the white students and 67 percent of the Asian students. Among freshmen who entered the California State University in 1973, only 25 percent of the American Indian and Chicano students and only 20 percent of the Black students had received a bachelor's degree by 1980--seven years later--in comparison to 46 percent of the white students and approximately 50 percent of the Asian students.

Low college graduation rates by minority students result from many factors, including weak academic preparation, inadequate awareness of and motivation toward academic work, lack of funds, low self-confidence, and personal problems. But graduation rates can be affected by institutional factors, such as insensitivity on the

part of faculty and staff, poor teaching, and inadequate counseling and other support services. Raymond Landis describes these factors in a paper on "retaining minority engineering students" (1981, p. 10):

> Universities today, particularly those serving a primarily commuter population, can be cold and unfriendly places in which students feel isolation and alienation. This situation is compounded in the case of minority students who must also cope with what may be their first exposure to a predominantly white environment. They may mistakenly attribute their sense of isolation and alienation to their being minority persons, not realizing that majority students experience similar feelings. This overall situation is particularly bad for a student majoring in engineering since most of the curriculum for the first two years is in mathematics, chemistry, and physics. Engineering students feel very little attachment to the Engineering School until they begin their junior year. Furthermore, resource limitations, lack of space, high student-faculty ratios, overenrollment, and a white male-dominated engineering faculty, many of whom lack a strong "people" orientation--all contribute adversely to the general environment which exists within the engineering school.

All public colleges and universities should seek to enhance their educational environment so that a larger proportion of their minority students complete their program in a timely fashion. Oakes College at the University of California, Santa Cruz, provides a useful model of an educational environment which is successful in recruiting and retaining large numbers of minority students. Approximately 45 percent of the student body is minority, with the majority of these first generation college students. A particularly strong feature of this College is its intensive lower-division science program which includes year round, on-going research activities by minority students working in a Science Center established through private funds.

While most campuses provide a full range of support services for all students, including minorities, the available data (albeit limited), suggest that discipline-specific support services involve faculty more directly with students, which appears to have a positive impact on student retention, in contrast to general learning assistance involving non-faculty staff. These discipline-specific programs also seem to be more successful than general programs in creating an "achievement" oriented rather than a "remedial" oriented environment in which students and staff function as counselors, advisors, tutors, mentors, "big brothers," and "big sisters," and

thereby develop peer pressure to encourage good academic work. Support services are "achievement" oriented rather than "remedial" oriented.

In other words, it is not clear that more money for expanded general academic support services will improve the graduation rate of minority students. Rather, what evidence exists points to more emphasis on support for students in each of the disciplines through involvement with faculty in their discipline. Models of such programs include the Minority Engineering Program at California State University, Northridge, and the undergraduate Professional Development Program at the University of California, Berkeley.

Beyond increasing the graduation rate of minorities, equal educational opportunity programs in Phase Five should encourage interested minority and women students to complete programs in the hard sciences, engineering, and business. Unfortunately, available jobs for humanities and social sciences graduates are relatively limited and their starting salaries relatively low, as Table 3 illustrates.

Salary levels and general employability are strongly related to the level of undergraduate mathematics that students complete. To major in engineering or the hard sciences requires gaining rigorous and theoretical competence in calculus during the freshman year, while study in business administration and the biological sciences requires at least some competence in calculus. In both cases, success in freshman calculus requires four years of thorough study of pre-calculus mathematics in high school. Colleges should make these facts known to prospective and new students.

GOALS AND ACTIVITIES IN GRADUATE AND PROFESSIONAL SCHOOL

The goal for equal educational opportunity programs beyond the bachelor's degree should be to increase the number and proportion of minorities and women who enroll in and complete doctoral and professional degree programs. Currently no State-funded efforts exist in this area, and only relatively limited support is available through the allocation of institutional or federal funds. Graduate and professional student affirmative action efforts have been viewed as an extension of efforts on the secondary school and the undergraduate levels, on the assumption that as more minorities and women are prepared at those levels, more will enroll in graduate and professional school. As efforts are subsequently expanded at this level, priorities should be directed toward (1) financial assistance for underrepresented students who lack funds for tuition and subsistence, (2) availability of support services for students

enrolled in professional programs, (3) teaching and research opportunities for those enrolled in graduate degree programs, and (4) increasing representation of women and minorities in the faculty, as role models and mentors for students.

Minority students are adequately represented among graduates of professional programs, in terms of their baccalaureate representation, but they are underrepresented among doctoral degree recipients as Table 1 indicated. The largest drop-off occurs among Chicano students, who received 2.9 percent of the doctoral degrees awarded by the University of California in 1979-80, compared to 6.9 percent of the bachelor's degrees awarded during the same year. But the annual number of doctorate degrees awarded to Black students during the past five years has declined 7.7 percentage points, with Blacks receiving only 2.5 percent of the doctorates awarded in 1979-80.

Women receive approximately half of all baccalaureate degrees awarded by the University, but they receive only one-fourth of the doctorates and only one-third of the three major professional degrees. While their representation at the graduate and professional levels has been increasing during the past decade, there is still some distance to be traveled before parity is achieved.

Minority women are the most underrepresented of all recipients of the doctorate. For example, in 1979-80, although 16 of the 36 doctorates awarded to Black students went to Black women, only 17 of the 83 awarded to Asian students went to Asian women, as did only 6 of the 41 awarded to Chicano students.

TABLE 3

ON CAMPUS RECRUITMENT,
AVERAGE OPENING JOB OFFERS FROM JANUARY 1981
BY FIELD AND MATHEMATICS REQUIREMENT

Undergraduate Curriculum	Number of Job Offers	Percentage of Offers	Mean Size of Offers Monthly	Mean Size of Offers Yearly
"Hard" Calculus Fields:				
Engineering	6,183	62%	$1,855	$22,260
Hard Sciences	626	6	1,615	19,380
"Soft" Calculus Fields:				
Business & Management	2,664	27	1,354	16,248
Economics	58	1	1,242	14,904
Agriculture, Biology, and Health Sciences	195	2	1,229	14,748
"No Calculus" Fields:				
Humanities	105	1	1,058	12,696
Social Sciences	160	2	1,047	12,564
Total Offers and Average Size	9,991	100%	$1,669	$20,028

Source: Adapted by Lucy W. Sells from College Placement Council (CPC), 1981. The beginning salary data reported are based on offers (not acceptances), to graduating seniors in select curricula and graduate programs during the normal college recruiting periods, September to January 1981. The CPC survey covers job openings in a broad range of functional areas, except teaching, within business, industry, and government. The data are submitted by a representative group of colleges throughout the United States.

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PRIORITIES FOR ACTION

To continue to expand educational opportunities for underrepresented students will require the comprehensive and coordinated effort at all levels of education outlined on previous pages. Additional resources will also be needed in order to redress the several factors which limit successful participation in college. During the current period of fiscal austerity in the State it is imperative that priority be assigned to the several components of this effort to guide State policy and support. For the next five years, the Commission recommends emphasis on the following components of the effort.

1. FOCUSING EFFORT ON THE HIGH SCHOOL CURRICULUM

Most of the components of a comprehensive approach needed to achieve this goal are already in place, but greatest emphasis must be directed to strengthening the college preparation of minority and low-income students in junior and senior high schools and in improving the articulation of curriculum between high schools and colleges. Additional funds for curricular improvement can be secured by reallocating monies provided through the Economic Impact Aid Program to support State Compensatory Education programs. Senate Bill 968 (Sieroty and Watson) would adopt this approach by directing that categorical aid may be used by school districts to improve their college preparatory programs.

The major priority in the State effort during the next five years should be to strengthen the basic college preparatory curriculum in mathematics, English, and science at California's junior and senior high schools. This effort must involve cooperation among secondary and postsecondary educators, parents, and local school boards. Among models for use in this effort are the College Core Curriculum at Phineas Banning High School in the Los Angeles Unified School District, and the College Preparatory Program in the Oakland Unified School District.

2. FOCUSING ATTENTION ON PROGRAM COMPLETION AS WELL AS ADMISSION

The goal enunciated by Assembly Concurrent Resolution 151--expanded access into college for economically, sexually, and ethnically underrepresented students--was adequate for the 1970s but insufficient for the 1980s. It resulted in emphasis being directed to enrollment as the desired result of equal educational opportunity activities. This emphasis has succeeded in increasing the numbers of minorities, low-income students, and women admitted to postsecondary education, but it has not resulted in substantially increasing the numbers graduating from college or completing their postsecondary program. Moreover, it has inhibited the implementation of a comprehensive effort in which outreach and retention activities are coordinated to facilitate students' successful completion of their educational program.

In order to improve the effectiveness of State supported activities for equal educational opportunity over the next five years, admission into college and completion of a college program should be considered as the two equally important goals to guide public policy.

3. ENHANCING THE EDUCATIONAL ENVIRONMENT

Special programs designed to assist ethnic minority college students are most successful when the college as a whole provides a supportive atmosphere or climate in which all students feel welcome and in which all are given a full opportunity to succeed, including the expectation that they will succeed. Without this atmosphere, the special programs are limited in their ability to retain students through college and the funding provided to operate the program is not utilized as efficiently as it should be. In addition, as discussed previously, student affirmative action must be a comprehensive institutional effort coordinating all existing campus resources.

Special efforts should be made by the chief administrative officers of public universities and colleges to assure that an academically stimulating and supportive environment is available for all students. The experiences of Oakes College at the University of California, Santa Cruz, can be used as a model to be replicated where possible by other public colleges. Moreover, the same demands for accountability and success in serving minority students now being placed on equal educational opportunity programs by the Legislature should be placed on institutions as a whole.

4. IMPROVING COMMUNITY COLLEGE OPPORTUNITIES

Beyond continued effort of Community Colleges to help minority students complete a certificate or associate degree program, improved coordination is needed among Community College and University educational opportunity programs in order to increase the number of Community College students who transfer to four-year institutions. While the Extended Opportunity Programs and Services of the Community Colleges has been successful in increasing substantially the numbers of minority students gaining access to postsecondary education, by itself, it cannot be expected to significantly increase the numbers of these students who subsequently earn a baccalaureate degree.

In order to improve the transfer opportunities from Community College to four-year institutions of underrepresented students with the potential of completing a baccalaureate program, transition to a baccalaureate awarding institution should be established as one of the major goals of the California Community Colleges and the Community College Extended Opportunity Programs and Services (EOPS), with substantial coordination of both institutional and existing EOPS funding for personnel and services to achieve this goals. In addition, the Legislature and the segments should review the relevant statutes and regulations to remove barriers to transition from one program to another and to assure greater program compatability between the Extended Opportunity Programs and Services of the Community Colleges and the Educational Opportunity Program, of the California State University.

5. IMPROVING UNDERGRADUATE SUPPORT SERVICES

As noted earlier, discipline-specific tutoring, advising, and counseling services appear to be more successful in retaining college students than are general support programs not tied to departments. While a wide variety of support services are necessary, faculty members tend to work more directly with students enrolled in their courses, placing their emphasis on academic achievement rather than remediation, and student study groups organized by discipline tend to encourage achievement by combining friendship with scholarship.

Special discipline-specific retention efforts should be encouraged on four-year college campuses particularly for students majoring in mathematics, science, engineering, or business. State funding for these efforts should be provided through the State General Fund to match funds generated from the private sector. Within five years

these efforts should be evaluated to decide about their replication on a larger scale.

6. IMPROVING COORDINATION OF POSTSECONDARY OUTREACH EFFORTS

Undesirable competition is increasing among college outreach programs working on the eleventh and twelfth grade levels to identify and recruit minority students to specific institutions and campuses. This competition stems at least partially from staff perception that program success will be judged primarily by increases in a specific campus enrollment of target students. Such competition is not beneficial to the students and wastes limited State resources. It can be discouraged by holding outreach programs accountable only for the number of target students recruited into postsecondary education generally.

In order to improve coordination of the college outreach programs, the successful components of the four-year pilot California Student Opportunity and Access Program (Cal-SOAP) should be replicated throughout the State. One particularly successful component is the "comprehensive student information system," developed by the San Diego project. Funding for this effort can be provided through the continuation of the current Cal-SOAP budget, with the money reallocated from the existing five projects for replication of the successful components. In addition, each of the segments should allocate funds in support of these coordinated, intersegmental efforts, as the University of California Systemwide Office has been doing during the past three years, and should give priority to funding those projects with a demonstrated commitment to intersegmental coordination.

7. RETAINING MATHEMATICS AND SCIENCE-BASED CAREER OPTIONS

Existing college programs have generally not addressed the educational needs of well-prepared minority students who aspire to mathematical, scientific, medical, or other related careers. As a result, many of these students either transfer into humanities or social sciences or drop out of college. Those programs which have demonstrated success in retaining minority college students in the rigorous mathematics and science disciplines demand high performance from the students and reward this performance through public recognition while providing a supportive, encouraging environment. They are generally discipline specific, initiated through the

interest and motivation of individual faculty members, and funded through institutional or non-governmental sources.

A high priority in the expenditure of equal educational opportunity funds over the next five years should be the provision of summer bridge or pre-college programs for ethnic minority students. These programs should emphasize faculty involvement and student achievement in mathematics and science and function as a transition from secondary school through the first year of college.

8. IMPROVING GRADUATE LEVEL EFFORTS

State policy has operated on the assumption that as more women and minority students successfully complete educational programs in secondary school and college, more of these students will enroll in graduate and professional programs. As a result, graduate and professional student affirmative action efforts have been viewed as a secondary priority to efforts at the high school and undergraduate levels.

During the next five years, priority in the achievement of equal educational opportunity should continue to be at the secondary and undergraduate levels. However, some State attention should also be given to the graduate and professional level. Current pilot programs funded by the federal government and institutional sources should be evaluated to encourage the replication of successful efforts. If federal funding is eliminated from successful projects, the State should consider providing funds to maintain these efforts. This recommendation should be reevaluated in 1985, to determine if a greater share of State funds should be allocated to graduate and professional level efforts.

9. INVOLVING THE PRIVATE SECTOR

Some of the most successful equal educational opportunity programs have stemmed from funding and other resources provided by business, industry, and private philanthropy, possibly because these sources have expected these programs to produce specific results during specified time periods, and in part because they have generally emphasized the importance of academic study for career opportunities--resulting in improved academic performance. In addition, during a period of limited public funding, it is imperative that private resources be utilized whenever possible.

In allocating State funds for student affirmative action projects during the next five years the State should encourage and where practical provide incentives for private sector support.

10. ASSESSING POTENTIAL IMPACT OF CHANGES IN FEDERAL FUNDING

During the past decade, the federal government has been a major source of funding for student financial assistance and special outreach and support service programs for low-income and minority students. During the current year, for example, the federal government is funding approximately 50 percent of the postsecondary outreach effort in California through the Upward Bound and Talent Search Programs and two Educational Opportunity Centers in Fresno and Los Angeles. The Administration has stated its intention to either substantially reduce or eliminate the funding for most of these programs during the next two years. Given the size and importance of these existing funding levels, this reduction will have substantial impact on existing equal educational opportunity efforts in California.

Following adoption of the 1982-83 budget by the United States Congress and the elimination of uncertainty about federal student financial assistance and educational opportunity programs, funding levels and priorities among the existing State funded programs should be reassessed. The substantial reduction or elimination of federal funding sources may require a reallocation of State funding.

APPENDIX A

Assembly Concurrent Resolution No. 151

RESOLUTION CHAPTER 209

Assembly Concurrent Resolution No. 151—Relative to public higher education.

[Filed with Secretary of State September 11, 1974.]

LEGISLATIVE COUNSEL'S DIGEST

ACR 151, Joint Committee on the Master Plan for Higher Education (Assemblyman Vasconcellos, Chairman). Public higher education.

Requests governing authorities of various institutions of public higher education to prepare a plan providing for addressing and overcoming, by 1980, ethnic, sexual, and economic underrepresentation in the makeup of the student bodies of institutions of public higher education, and to submit such plan to the California Postsecondary Education Commission by July 1, 1975, and request similar reports annually thereafter.

Directs California Postsecondary Education Commission to integrate and transmit such plans to the Legislature by first legislative day of 1976, and directs similar reports annually thereafter.

WHEREAS, The Legislature recognizes that certain groups, as characterized by sex, ethnic, or economic background, are underrepresented in our institutions of public higher education as compared to the proportion of these groups among recent California high school graduates; and

WHEREAS, It is the intent of the Legislature that such underrepresentation be addressed and overcome by 1980; and

WHEREAS, It is the intent of the Legislature that this underrepresentation be eliminated by providing additional student spaces rather than by rejecting any qualified student; and

WHEREAS, It is the intent of the Legislature to commit the resources to implement this policy; and

WHEREAS, It is the intent of the Legislature that institutions of public higher education shall consider the following methods for fulfilling this policy:

(a) Affirmative efforts to search out and contact qualified students.

(b) Experimentation to discover alternate means of evaluating student potential.

(c) Augmented student financial assistance programs.

(d) Improved counseling for disadvantaged students;

now, therefore, be it

Resolved by the Assembly of the State of California, the Senate thereof concurring, That the Regents of the University of California,

the Trustees of the California State University and Colleges, and the Board of Governors of the California Community Colleges are hereby requested to prepare a plan that will provide for addressing and overcoming, by 1980, ethnic, economic, and sexual underrepresentation in the makeup of the student bodies of institutions of public higher education as compared to the general ethnic, economic, and sexual composition of recent California high school graduates, and to submit such plan to the California Postsecondary Education Commission on or before July 1, 1975. The California Postsecondary Education Commission shall integrate and transmit the plans to the Legislature with its comments by the first legislative day of 1976. The regents, the trustees, and the board of governors shall annually report to the California Postsecondary Education Commission, on or before July 1 of each year, which shall integrate and transmit the reports to the Legislature by December 31 of each year with evaluations and recommendations, on their progress, including specification as to what obstacles stand in the way of implementation of the plan; and be it further

Resolved, That the Chief Clerk of the Assembly transmit copies of this resolution to the Regents of the University of California, the Trustees of the California State University and Colleges, the Board of Governors of the California Community Colleges, and the California Postsecondary Education Commission.

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APPENDIX B

Conclusions from the Commission's First Three Reports on Equal Educational Opportunity

The Commission's initial report on equal educational opportunity in California postsecondary education (1976) contained three major conclusions:

- The student affirmative action plans prepared by the segments in 1975 do not provide an adequate basis on which to develop a coherent statewide plan to address and overcome the problem of underrepresentation, as requested by the Legislature in ACR 151.

- Black and Spanish-surnamed students continue to be underrepresented in public postsecondary education, and, during 1973 and 1974, the degree of underrepresentation apparently increased, rather than decreased.

- Increased financial assistance should be provided for: (1) recruitment programs to increase the admissions-eligibility pool of underrepresented groups, and (2) expanded student-support services to promote successful educational experiences for those admitted to public postsecondary institutions.

The second report, published in 1977, contained five conclusions:

- Despite considerable effort by the segments, there is no evidence to indicate that progress has been made in the past four years to increase the proportions of ethnic-minority enrollments in public postsecondary education. Chicano and Black students are still underrepresented, and since 1973 the degree of underrepresentation has apparently increased, both in the California Community Colleges and the University of California. Women are also underrepresented, particularly in the graduate programs of the University of California.

- One of the goals of ACR 151 is for the public segments to expand their enrollment of Black and Chicano/Latino students in order to adequately address and overcome, by 1980, ethnic underrepresentation in their student bodies. This goal will not be achieved.

- The lack of progress during the past four years in expanding the enrollment of ethnic minorities does not necessarily indicate a

lack of commitment to the goal of equal educational participation by the public institutions. Several factors beyond the control of the institutions have limited their success. These factors include problems of unemployment and inflation, the extension of federally funded aid programs to students attending accredited private vocational/technical institutions, the high secondary-school drop-out rate for Chicano and Black students, the inadequate number of trained bilingual teachers, and the inadequate elementary- and secondary-school training received by many ethnic minorities from low-income communities.

- There is need for a cooperative approach by the three public segments, and the independent institution as well, to make further progress in the development and implementation of plans for equal educational participation.

- Chicano and Black students have had less opportunity than white students to participate in and benefit from public postsecondary education. Efforts to eliminate these inequalities must focus on several barriers to change, including inadequate elementary- and secondary-school education; low family income and the cost of a college education; frequently insensitive, and sometimes hostile, faculty and staff attitudes; social and cultural constraints; standardized admissions tests; and ineffective or inadequate student personnel services.

The third report (1980) offered these eight conclusions:

- The goals of ACR 151 will not be achieved until a larger proportion of ethnic minority and low-income students (1) receive better academic training in grades K-12, and (2) graduate from high school. The postsecondary community has an obligation to work with the Department of Education and the elementary and secondary schools in efforts to increase and improve the academic motivation and preparation of ethnic minority and low-income students.

- While all of the ethnic minority groups considered in this report can be served more effectively by the State's public postsecondary institutions, the underrepresentation of Chicano students is particularly severe since they constitute the largest and the fastest-growing ethnic minority group in California.

- During recent years, there has been a substantial financial commitment by the federal and State governments to support programs designed to expand educational opportunities for ethnic

minorities and low-income peoples. While additional financial resources can always be used to establish new and desirable programs, it is particularly imperative now that existing resources be used more effectively. Accordingly, there is a need for more extensive evaluations of student affirmative action programs in order to identify those strategies which have been either successful or unsuccessful in expanding educational opportunities for minority students.

- Many innovative student affirmative action programs have been implemented during the past few years designed both to improve the academic preparation of ethnic minority students enrolled in junior and senior high schools and to raise their aspirations to attend college. It can be expected that these programs will begin to have an impact on postsecondary enrollment levels by ethnic minority students during the next few years, as the program participants complete their final year of high school work.

- There is a general lack of formal cooperative efforts among postsecondary institutions in outreach programs designed to assist ethnic minority and low-income students gain access to postsecondary education.

- While there are a multitude of federal, State, and institutionally funded student affirmative action programs, there is inadequate coordination among them to ensure the effective use of available resources and the elimination of undesirable duplication.

- Most of the emphasis in existing student affirmative action programs has been placed on the recruitment of ethnic minorities into postsecondary institutions. There is a need to place an expanded emphasis on assisting nontraditional students in (1) transferring from two-year to four-year institutions, and (2) persisting in college through the completion of a baccalaureate, master's, and/or doctoral degree.

APPENDIX C

Ethnic Composition of Students and Graduates of California Postsecondary Institutions, Fall 1975 - Fall 1980

The following tables provide data on the ethnic composition of students enrolled in the four segments of postsecondary education from Fall 1975 through Fall 1980, and the ethnic composition of degree recipients from the California State University and the University of California during the years 1975-76 through 1979-80.

TABLE 1

PARTICIPATION, REPRESENTATION AND DISTRIBUTION OF AMERICAN INDIAN STUDENTS IN POSTSECONDARY DEGREE-GRANTING INSTITUTIONS FALL 1975 TO FALL 1980

		Fall 1975	Fall 1976	Fall 1977	Fall 1978	Fall 1979	Fall 1980
California Community Colleges							
	Number Enrolled	11,141	15,118	13,027	12,751	11,388	17,137
	Percent		1.63	1.50	1.48	1.46	1.52
	Distribution Index		1.11	1.10	1.10	1.11	1.10
California State University and Colleges							
Undergraduate	Number Enrolled	3,150	2,312	2,121	2,568	2,402	2,457
	Percent	1.75	1.30	1.28	1.45	1.34	1.29
	Distribution Index		0.89	0.94	1.08	1.02	0.93
Graduate	Number Enrolled	664	591	497	556	517	510
	Percent	1.34	1.20	1.09	1.21	1.14	1.10
	Distribution Index		1.59	1.37	1.69	1.75	1.80
Total	Number Enrolled	3,814	2,903	2,618	3,124	2,919	2,967
	Percent	1.66	1.28	1.24	1.40	1.30	1.25
	Distribution Index		0.92	0.95	1.10	1.05	0.95
University of California							
Undergraduate	Number Enrolled	443	438	448	462	432	479
	Percent	0.53	0.54	0.56	0.56	0.49	0.53
	Distribution Index		0.37	0.41	0.42	0.37	0.38
Graduate	Number Enrolled	145	165	134	134	141	142
	Percent	0.49	0.60	0.51	0.51	0.43	0.43
	Distribution Index		0.79	0.63	0.71	0.66	0.70
Total	Number Enrolled	588	603	582	596	573	621
	Percent		0.56	0.54	0.55	0.48	0.51
	Distribution Index		0.40	0.42	0.43	0.39	0.39
Independent Institutions							
Undergraduate	Number Enrolled		753	573	495	474	931
	Percent		0.90	0.76	0.54	0.67	0.79
	Distribution Index		0.62	0.56	0.40	0.51	0.57
Graduate	Number Enrolled		222	401	320	223	286
	Percent		0.42	0.70	0.47	0.40	0.39
	Distribution Index		0.56	0.67	0.65	0.62	0.64
Total	Number Enrolled		975	974	815	697	1,217
	Percent		0.72	0.74	0.51	0.55	0.64
	Distribution Index		0.51	0.56	0.40	0.44	0.49
Combined							
Undergraduate	Number Enrolled		18,621	16,169	16,276	14,696	21,004
	Percent		1.47	1.36	1.34	1.31	1.38
Graduate	Number Enrolled		978	1,032	1,010	881	938
	Percent		0.76	0.80	0.72	0.65	0.61
Total	Number Enrolled		19,599	17,201	17,286	15,577	21,942
	Percent		1.40	1.31	1.28	1.24	1.31

TABLE 2

PARTICIPATION, REPRESENTATION AND DISTRIBUTION OF ASIAN STUDENTS IN POSTSECONDARY DEGREE-GRANTING INSTITUTIONS FALL 1975 TO FALL 1980

		Fall 1975	Fall 1976	Fall 1977	Fall 1978	Fall 1979	Fall 1980
California Community Colleges							
	Number Enrolled	36,766	41,564	45,238	48,354	51,614	72,501
	Percent		4.47	5.21	5.61	6.61	6.43
	Distribution Index		0.85	0.86	0.85	0.92	0.92
California State University and Colleges							
Undergraduate	Number Enrolled	10,723	12,779	12,927	15,525	13,506	14,714
	Percent	5.96	7.21	7.81	8.79	7.53	7.74
	Distribution Index		1.37	1.29	1.33	1.05	1.10
Graduate	Number Enrolled	3,013	3,485	3,208	3,539	3,035	3,055
	Percent	6.06	7.08	7.06	7.72	6.70	6.60
	Distribution Index		1.25	1.35	1.21	1.15	1.06
Total	Number Enrolled	13,736	16,264	16,135	19,064	16,541	17,769
	Percent	5.98	7.18	7.65	8.57	7.36	7.52
	Distribution Index		1.36	1.27	1.30	1.05	1.08
University of California							
Undergraduate	Number Enrolled	8,182	8,587	9,222	9,876	9,862	10,961
	Percent	9.79	10.64	11.49	12.09	11.28	12.19
	Distribution Index		2.03	1.89	1.83	1.58	1.74
Graduate	Number Enrolled	1,883	1,930	1,939	1,963	2,124	2,718
	Percent	6.35	7.01	7.33	7.52	6.40	8.27
	Distribution Index		1.23	1.40	1.18	1.10	1.33
Total	Number Enrolled	1,006	1,052	1,116	1,184	11,986	13,679
	Percent	8.89	9.72	10.46	10.98	9.94	11.14
	Distribution Index		1.84	1.73	1.67	1.42	1.61
Independent Institutions							
Undergraduate	Number Enrolled		3,692	4,716	6,466	5,097	8,662
	Percent		4.43	6.27	7.05	7.22	7.37
	Distribution Index		0.84	1.03	1.07	1.01	1.05
Graduate	Number Enrolled		1,933	2,451	3,453	2,748	3,756
	Percent		3.67	4.29	5.04	4.92	5.12
	Distribution Index		0.50	0.62	0.79	0.84	0.82
Total	Number Enrolled		5,625	7,167	9,919	',845	12,418
	Percent		4.13	5.41	6.19	6.20	6.51
	Distribution Index		0.78	0.90	0.94	0.88	0.94
Combined							
Undergraduate	Number Enrolled		66,622	72,103	80,221	80,079	106,838
	Percent		5.24	6.07	6.62	7.16	7.01
Graduate	Number Enrolled		7,348	7,598.	8,955	7,907	9,529
	Percent		5.68	5.22		5.84	6.23
Total	Number Enrolled					87,986	116,367
	Percent					7.02	6.94

TABLE 3

PARTICIPATION, REPRESENTATION AND DISTRIBUTION OF BLACK STUDENTS
IN POSTSECONDARY DEGREE-GRANTING INSTITUTIONS
FALL 1975 TO FALL 1980

		Fall 1975	Fall 1976	Fall 1977	Fall 1978	Fall 1979	Fall 1980
California Community Colleges							
	Number Enrolled	84,674	88,586	88,000	81,724	74,029	107,052
	Percent		9.53	10.14	9.48	9.48	9.49
	Distribution Index		1.10	1.10	1.09	1.10	1.10
California State University and Colleges							
Undergraduate	Number Enrolled	12,584	12,850	12,007	14,407	13,459	13,554
	Percent	6.99	7.25	7.26	8.15	7.50	7.13
	Distribution Index		0.84	0.79	0.94	0.87	0.83
Graduate	Number Enrolled	2,543	2,584	2,400	2,667	2,394	2,370
	Percent	5.11	5.25	5.28	5.82	5.29	5.12
	Distribution Index		1.08	1.11	1.21	1.21	1.15
Total	Number Enrolled	15,127	15,434	14,407	17,074	15,853	15,924
	Percent	6.58	6.81	6.83	7.67	7.06	6.74
	Distribution Index		0.82	0.78	0.92	0.87	0.82
University of California							
Undergraduate	Number Enrolled	3,472	3,355	3,343	3,274	3,399	3,467
	Percent	4.16	4.16	4.17	4.01	3.89	3.86
	Distribution Index		0.48	0.45	0.46	0.45	0.45
Graduate	Number Enrolled	1,312	1,235	1,157	1,056	1,117	1,148
	Percent	4.42	4.49	4.37	4.05	3.37	3.49
	Distribution Index		0.94	0.92	0.85	0.77	0.78
Total	Number Enrolled	4,784	4,590	4,500	4,330	4,516	4,615
	Percent	4.23	4.24	4.22	4.02	3.74	3.76
	Distribution Index		0.51	0.48	0.48	0.46	0.46
Independent Institutions							
Undergraduate	Number Enrolled		5,156	5,691	6,479	5,216	7,248
	Percent		6.18	7.60	7.04	7.39	6.17
	Distribution Index		0.71	0.83	0.79	0.86	0.72
Graduate	Number Enrolled		2,336	2,483	3,012	2,414	3,305
	Percent		4.44	4.36	4.39	4.32	4.50
	Distribution Index		0.93	0.92	0.91	0.99	1.01
Total	Number Enrolled		7,492	8,174	9,491	7,630	10,553
	Percent		5.51	6.11	5.85	6.03	5.53
	Distribution Index		0.66	0.72	0.70	0.74	0.67
Combined							
Undergraduate	Number Enrolled		109,947	109,041	105,884	96,103	131,321
	Percent		8.65	9.17	8.73	8.60	8.61
Graduate	Number Enrolled		6,155	6,040	6,735	5,925	6,823
	Percent		4.79	4.68	4.79	4.38	4.46
Total	Number Enrolled		116,102	115,081	112,619	102,028	138,144
	Percent		8.29	8.73	8.32	8.14	8.23

TABLE 4

PARTICIPATION, REPRESENTATION AND DISTRIBUTION OF CHICANO STUDENTS IN POSTSECONDARY DEGREE-GRANTING INSTITUTIONS FALL 1975 TO FALL 1980

		Fall 1975	Fall 1976	Fall 1977	Fall 1978	Fall 1979	Fall 1980
California Community Colleges							
	Number Enrolled	88,017	94,367	87,621	98,306	87,813	122,538
	Percent		10.15	10.10	11.41	11.25	10.87
	Distribution Index		1.09	1.08	1.10	1.10	1.07
California State University and Colleges							
Undergraduate	Number Enrolled	13,677	13,924	13,542	15,990	16,048	17,397
	Percent	7.60	7.85	8.18	9.05	8.95	9.15
	Distribution Index		0.85	0.87	0.87	0.88	0.90
Graduate	Number Enrolled	2,643	2,829	2,728	3,079	3,146	3,372
	Percent	5.32	5.75	6.01	6.71	6.95	7.29
	Distribution Index		1.23	1.26	1.35	1.41	1.39
Total	Number Enrolled	16,320	16,753	16,270	19,069	19,194	20,769
	Percent	7.10	7.40	7.72	8.57	8.54	8.78
	Distribution Index		0.83	0.86	0.87	0.89	0.91
University of California							
Undergraduate	Number Enrolled	4,155	4,351	4,468	4,631	4,931	5,338
	Percent	4.97	5.39	5.57	5.67	5.64	5.94
	Distribution Index		0.58	0.59	0.55	0.55	0.59
Graduate	Number Enrolled	1,443	1,456	1,414	1,379	1,509	1,633
	Percent	4.86	5.29	5.34	5.28	4.55	4.97
	Distribution Index		1.13	1.12	1.06	0.93	0.95
Total	Number Enrolled	5,598	5,807	5,882	6,010	6,440	6,971
	Percent	4.94	5.37	5.51	5.58	5.34	5.68
	Distribution Index*		0.61	0.62	0.57	0.55	0.59
Independent Institutions							
Undergraduate	Number Enrolled		5,315	5,934	6,740	5,337	9,208
	Percent		6.37	7.93	7.32	7.56	7.84
	Distribution Index		0.69	0.84	0.70	0.74	0.77
Graduate	Number Enrolled		1,776	2,001	2,540	2,013	3,016
	Percent		3.37	3.52	3.70	3.60	4.11
	Distribution Index		0.72	0.74	0.74	0.73	0.78
Total	Number Enrolled		7,091	7,935	9,280	7,350	12,224
	Percent		5.16	5.93	5.72	5.81	6.40
	Distribution Index		0.58	0.66	0.58	0.60	0.66
Combined							
Undergraduate	Number Enrolled		117,957	111,565	125,667	114,129	154,481
	Percent		9.28	9.39	10.36	10.21	10.13
Graduate	Number Enrolled		6,061	6,143	6,998	6,668	8,021
	Percent		4.68	4.76	4.98	4.93	5.25
Total	Number Enrolled		124,018	117,708	132,665	120,797	162,502
	Percent		8.86	8.93	9.81	9.64	9.69

TABLE 1: DEGREES CONFERRED BY ETHNICITY, CALIFORNIA

		Total Degrees Awarded	Non-Resident Alien	American Indian/ Alaskan Native	
				N	%
CALIFORNIA STATE UNIVERSITY					
Bachelor's Degrees					
	1975-76	44,598	1,078	513	1.4
	1976-77	43,291	964	390	1.1
	1977-78	43,465	979	408	1.2
	1978-79	41,842	1,722	417	1.2
	1979-80	42,122	1,967	370	1.1
Master's Degrees					
	1975-76	10,087	398	73	1.1
	1976-77	9,944	376	69	1.1
	1977-78	10,150	403	76	1.1
	1978-79	9,701	878	84	1.3
	1979-80	9,732	977	79	1.1
UNIVERSITY OF CALIFORNIA					
Bachelor's Degrees					
	1975-76	20,954	464	83	0.4
	1976-77	20,878	383	91	0.5
	1977-78	20,187	367	91	0.5
	1978-79	19,811	388	90	0.5
	1979-80	19,989	419	91	0.5
Master's Degrees					
	1975-76	6,009	843	24	0.5
	1976-77	5,963	863	27	0.6
	1977-78	5,602	828	25	0.6
	1978-79	5,315	781	26	0.7
	1979-80	5,665	902	31	0.7
Doctoral Degrees					
	1975-76	2,068	354	1	0.0
	1976-77	1,983	332	10	0.8
	1977-78	1,890	313	5	0.4
	1978-79	1,914	285	5	0.4
	1979-80	2,030	321	3	0.2
First Professional Degrees					
	1975-76	1,681	22	10	0.7
	1976-77	1,714	25	14	0.9
	1977-78	1,724	12	11	0.7
	1978-79	1,760	12	7	0.4
	1979-80	1,832	2	8	0.5

*Percentages computed on known ethnicity totals, excluding Non-Resident Alien,

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Asian/ Pacific Islander		Filipino		Black		Chicano		White	
N	%	N	%	N	%*	N	%	N	%
2,107	5.9	67	0.2	1,766	5.0	2,063	5.8	28,981	81.6
2,043	6.0	124	0.4	1,645	4.8	1,936	5.7	28,003	82.0
2,122	6.2	160	0.5	1,656	4.8	2,150	6.3	27,847	81.0
2,208	6.6	271	0.8	1,752	5.2	2,171	6.5	26,740	79.7
2,293	6.8	388	1.2	1,767	5.3	2,305	6.9	26,326	78.7
372	5.4	6	0.0	417	6.1	292	4.3	5,705	83.1
395	6.2	20	0.3	353	5.6	317	5.0	5,185	81.8
373	5.5	25	0.4	374	5.5	327	4.8	5,583	82.6
387	5.8	57	0.9	345	5.2	344	5.2	5,430	81.7
414	6.1	110	1.6	290	4.3	378	5.6	5,514	81.3
1,640	8.6	97	0.5	677	3.5	632	3.3	15,952	83.6
1,621	8.6	110	0.6	646	3.4	627	3.3	15,839	83.6
1,687	9.3	103	0.6	567	3.1	628	3.5	15,033	83.0
1,765	10.1	135	0.8	522	3.0	592	3.4	14,374	82.2
1,865	10.5	137	0.8	533	3.0	856	4.8	14,283	80.4
246	5.4	12	0.3	224	4.9	136	3.0	3,948	86.0
305	6.6	11	0.2	182	3.9	144	3.1	3,941	85.5
277	6.5	10	0.2	166	3.9	121	2.8	3,673	86.0
287	7.3	15	0.4	122	3.1	118	3.0	3,364	85.6
282	6.6	20	0.5	130	3.0	199	4.6	3,632	84.6
56	4.1	0	0.0	39	2.9	16	1.2	1,246	91.8
39	3.0	0	0.0	50	3.8	34	2.6	1,177	89.8
58	4.3	2	0.1	36	2.6	27	2.0	1,232	90.6
57	4.5	0	0.0	36	2.8	27	2.1	1,150	90.2
83	5.9	0	0.0	36	2.5	41	2.9	1,245	88.4
140	9.1	8	0.5	88	5.7	109	7.1	1,183	76.9
140	9.0	8	0.5	96	6.1	94	6.0	1,209	77.5
161	10.2	13	0.8	102	6.4	112	7.1	1,186	74.8
150	9.3	18	1.1	106	6.6	115	7.1	1,220	75.5
157	9.2	12	0.7	114	6.6	159	9.3	1,248	72.8

No Response, and Other.

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